# AUTHOR INDEX TO VOLUME 34


Adams, H. D., 721
Adams, W. S., 417
Aiken, H. H., 295
Aksoy, M., 851
Aladağ, T., 851
Alman, R. W., 93
Andrews, J. R., 329
Auchincloss, J. H., Jr., 452
Avioli, L. V., 329

Bader, M. E., 435
Bader, R. A., 435
Baitsch, H., 151
Balsløv, J. T., 753
Bearn, A. G., 583, 680
Berlin, N. I., 213
Bishop, H., 19
Bittar, E. E., 82
Block, J. B., 228
Blombäck, M., 236
Blum, J. J., 565
Bono, R. F., 297
Bostanci, N., 851
Bouhuys, A., 470
Brace, K. C., 329
Braunwald, E., 147, 320
Brink, A. J., 52
Brown, J., 786
Brunjes, S., 168
Bunim, J. J., 813
Bunnell, I. L., 325
Burns, S. L., 856

Cahill, G. F., Jr., 407
Cairns, J., 600
Callow, A. D., 93
Camara, J., 71
Camp, W. A., 554
Canellos, G. P., 741
Çetingil, A. I., 851
Chazan, J. A., 350
Childs, B., 663
Cline, M. J., 213
Coburn, J. W., 786
Cohen, P., 76
Cohen, S., 256
Costanza, D. J., 125
Cotlove, E., 329

Davern, C. I., 600
Davies, D. R., 735
Donaldson, R. M., Jr., 572
Donoso, E., 477
Dowling, J. T., 786
Duberstein, J. L., 435
Dubin, H. V., 544

Edelman, M. H., 477
Edgcomb, J., 228
Edwards, J. H., 627
Ehrenworth, L., 272
Eisen, A., 228
Engel, F. L., 726
Engle, R. L., Jr., 554
Epifano, L., 452

Fahey, J. L., 213
Farrar, W. E., Jr., 134
Fazekas, J. F., 93
Finby, N., 483
Fowler, N. O., 308
Frajola, W. J., 426
Fraser, F. C., 585
Froesch, E. R., 151

Gaffney, T. E., 320
Galloway, J. A., 177
Giebisch, G., 1
Gilbert, R., 452
Gilmore, J. P., 440
Ginn, H. E., 867
Glick, G., 42, 264
Goldfarb, T. G., 578
Goldman, J. K., 407
Goldstein, M. H., 765
Gralnick, H., 308
Grant, C., 325
Grayzel, D. M., 71
Greene, D. G., 325
Gregory, C., 477
Greider, M. H., 426

Halberstam, M. J., 856
Haller, J. A., Jr., 142
Hasterlik, R. J., 796
Hatch, F. T., 741
Heath, C. W., Jr., 796
Helmsworth, J. A., 308
Hemley, S. D., 483
Hertko, E. J., 288
Hinman, F., Jr., 338
Hiss, J. M., Jr., 786
Hodgman, J., 168
Hodson, C. J., 735
Holt, P. R., 572
Hutch, J. A., 338

Ingram, V. M., 674

Jane, J. A., 281
Jaworski, Z. F., 523
Johns, V. J., Jr., 168
Jørgensen, H. E., 753
Jorpes, J. E., 236

Kahana, L., 726
Kattus, A. A., 19
Keith, T. A., 308
Keith, T. A., III, 535
Kocabalkan, N., 851
Kodlin, D., 359
Koffler, D., 252
Kossmann, R. J., 554
Kroeker, E. J., 721
Kunin, A. S., 856

Labhart, A., 151
La Du, B. N., 813
Lawrence, D. G., 775
Lazor, M. Z., 329
Lees, R. S., 741
Legg, M. A., 775
Leight, L., 142
Leon, A. S., 721
Levitt, M. F., 765
Li, C. C., 702
Locke, S., 775
Longmire, W. P., 19
Lynch, H. J., Jr., 221
Lyon, S. A., 535

MacAlpin, R., 19
MacKay, B. R., 856
Mangum, J. F., 500
Marnell, R. T., 192
McCann, S. M., 379
McConnell, R. B., 692
McCredie, R. M., 264
McGaff, C. J., 142
McKusick, V. A., 594
Mellins, H. Z., 483
Miller, E. R., 338
Minkowitz, S., 252
Misanik, L., 82

# Author Index


Mistilis, S. P., 350
Mitchell, J. H., 440
Moreno, A. H., 297
Morris, J. F., 867
Movitt, E. R., 500
Mullan, S., 281

Nilsson, I. M., 236
Nowack, J., 168

Oakley, C., 264
O'Brien, W. M., 813
O'Loughlin, B. J., 19

Panke, W. F., 297
Papp, B. J., 578
Parker, C. W., 747
Parker, W. C., 680
Paronetto, F., 256
Paul, R. E., Jr., 93
Pickering, G., 7
Plair, C. M., 88
Popper, H., 256
Porter, W. R., 500
Pouget, J. M., 721
Prader, A., 151
Price Evans, D. A., 639

Redmond, A. J., 541
Remensnyder, J. P., 440
Rosenberg, I. H., 741
Rosenheim, M. L., 735
Rosoff, L., 461
Ross, E. J., 735
Ross, J., Jr., 147
Rosse, W. F., 76
Rousselot, L. M., 297
Rubin, E., 71

Sambhi, M. P., 461
Sarnoff, S. J., 440
Scarpelli, D. G., 426
Schotland, D. L., 544
Seçer, F., 851
Şestakof, D., 851
Sheon, R. P., 486
Sholiton, L. J., 192
Shuman, C. R., 177
Sitomer, G., 565
Skoog, W. A., 417
Slavin, R. E., 565
Smith, J. F., 735
Smoller, M., 125
Solomon, A., 213, 256
Spingarn, C. L., 477
Stern, C., 715
Stone, G. E., 541
Sunderman, F. W., 875
Sunderman, F. W., Jr., 875

Taylor, R. L., 221
Taxay, E. P., 295
Thompson, D. D., 867
Thorn, G. W., 407
Towery, B. T., 142

Udhoji, V. N., 461

Van Ommen, R. A., 486
Van Scott, E. J., 228

Waldmann, T. A., 76
Waye, J. D., 477
Weber, H. W., 52
Wedeen, R. P., 765
Weil, M. H., 461
Werk, E. E., Jr., 192
White, H. H., 544
White, J. C., 875
Wigod, R. A., 786
Wilens, S. L., 88
Wilhyde, D. E., 281
Williams, M. J., 103
Windhager, E. E., 1
Wolan, C. T., 523
Wolf, H. P., 151
Wolf, S. M., 544
Wrong, O. M., 735
Wysor, W. G., Jr., 221

Young, W. J., 663
Yu, P. N., 42

Zak, F. G., 71, 252
Zamenhof, S., 609

# SUBJECT INDEX TO VOLUME 34

(CPC) = Clinicopathologic Conference; (CSC) = Combined Staff Clinic; (E) = Editorial


Acetyl strophanthidin therapy, potassium changes in heart during, 440
Actalasia
  an autosomal recessive trait, 639
  and hydrogen peroxide, 639
ACTH-secreting neoplasm and adrenocortical hyperplasia (CPC), 394
ACTH therapy
  effect on patient survival time, 192
  in Cushing's syndrome with malignant tumor, 726
Adenohypophysis (CSC), 365
Adrenal function
  in hypoparathyroidism, 856
  in idiopathic hypoglycemia, 168
  relationship of brain metastases to, 192
Adrenal hyperplasia
  produced by ACTH-secreting neoplasm, parotid tumor (CPC), 394
  relation to gynecomastia, 103
Adrenal steroid therapy of infiltrative ophthalmopathy, 786
Adrenalectomy, subtotal, for Cushing's syndrome followed by remission and relapse, 726
Adrenergic nervous system in heart failure, 320
Adrenocortical function in carcinoma of lung, 192
Adrenocortical insufficiency and hypoparathyroidism, possible sequel of hepatitis, 856
Adrenocorticotropin production in gigantism with hypopituitarism, 407
Alcaptonuria
  geographic and racial distribution, 813
  ochronosis and ochronotic arthropathy, 813
Alkylating agents and mutations, 609
Amino acid
  composition of cryoglobulin, 565
  substitutions in abnormal human hemoglobins, 674
Anastomosis, portacaval, for prevention of recurrent variceal hemorrhage, 297
Anemia
  acute hemolytic
    and moth ball ingestion, 639
    in favism, 639
  aplastic, classification of, 500
  in macroglobulinemia, 213
  macrocytic, relation to intestinal malabsorption, 856
  megaloblastic, pathogenesis in scurvy, 350
  pernicious, lactic acid dehydrogenase activity in, 578
  sickle cell, punctate calcifications of spleen in, 483
Aneurysm
  dissecting, of aorta, origin and meaning, 7
  thoracic (CPC), 113
Angina, variant form of, 19
Angina pectoris
  and aortic coarctation, 19
  coronary angiograms and exercise electrocardiogram in, 19
Angiograms
  coronary, in angina pectoris, 19
  in diagnosis of occlusive aortocranial disease, 93
Anoxia and acute tubulo-interstitial nephritis, 753
Antiadrenergic drugs and congestive heart failure, 320
Antibody formation induced by simple chemical determinant (E), 747
Antibody response, genetic regulatory mechanism in, 680
Anticoagulant against antihemophilic globulin, 272
Antidepressants and heredity, 639
Antihemophilic factor deficiency in von Willebrand's disease, 236
Antihemophilic globulin, anticoagulant against, 272
Antimony preparations in Schistosomiasis mansoni, 477
Anuria and renal insufficiency, 753
Aorta
  coarctation of, and angina pectoris, 19
  dissecting aneurysm of, origin and meaning, 7
Aortic regurgitation following mitral valvotomy, 308
Aortocranial disease, clinical localization versus angiographic findings, 93
Arterial oxygen saturation and polycythemia vera (E), 435
Arteries, role in development of vasovagal reactions, 42
Arterioles, description of lesions in, 7
Arteriosclerosis
  and atherosclerosis, clarification of terms, 7
  and diabetes, 177
Artery
  carotid, difficulties in diagnosis of occlusive aortocranial disease of, 93
  compression, renal, by pheochromocytoma, 735
  coronary, pathologic anatomy in angina pectoris, 19
  pulmonary, fistula between atrium and, 721
Arthropathy, ochronotic, clinical features, 813
Aschoff bodies, occurrence after surgery for mitral stenosis, 308
Ascites, effect of portacaval anastomosis on, 297
Ascorbic acid
  deficiency, pathogenesis of, 350
  depletion method, ovarian, 379
Asthma, experimental, and posture, 470
Atheroma, origin of name and meaning, 7
Atherosclerosis
  and arteriosclerosis, clarification of terms, 7
  development in one identical twin, 741
  relationship of abnormal lipid and carbohydrate metabolism to, 741

Atrial fibrillation, occurrence after surgery for mitral stenosis, 308
Atrial versus ventricular pressure in heart block, 325
Atrium, left
congenital communication between pulmonary artery and, 721
fistula between right pulmonary artery and, 721
Atrium, right, valve-closing function of, 325
Atropine, effects on hemodynamic changes during spontaneous vasovagal reactions, 42
Autosomes in sex determination, 715

Back pain
in unilateral renal vein thrombosis, 867
manifestation of leukemia, 281
Bacteria, genetic regulation in, 680
Bacterial endocarditis, subacute, caused by Hemophilus aphrophilus treated successfully, 535
Bacterial shock, hemodynamics of, 461
Base analogues and mutations, 609
Behcet's disease, neurologic aspects of, 544
Biochemical genetics at molecular level, 674
Bladder neck obstruction and reflux, 338
Bleeding
from ruptured varix treated with portacaval shunt, 297
into tissues, pathogenesis in scurvy, 350
Blood
catalase activity in actalasia, 639
glucose levels in diabetic surgical patients, 177
groups and disease, 692
sugar levels in idiopathic hypoglycemia, 168
Bone marrow
failure, idiopathic true, 500
inclusion bodies in plasma cells in multiple myeloma and Fanconi syndrome, 125
Brain metastases and adrenal hyperfunction, 192
Breast
carcinoma, metastases causing death five years after mastectomy (CPC), 839
histologic examination of, 103
hyperplasia of, 103
Bronchopneumonia, aspiration, Torulopsis glabrata septicemia arising from, 252
Bruit in diagnosis of occlusive aortocranial disease, 93

Calcification
occurrence after surgery for mitral stenosis, 308
punctate, of spleen in sickle cell anemia, 483
Calcium levels in sarcoidosis, 221
Cancer
among children, 796
and life span in smokers and nonsmokers, 88
cell type of, relation of steroid levels and survival time to, 192
Cape Coloured, fibroplastic parietal endocarditis in, 52
Carbohydrate metabolism, abnormal, and atherosclerosis, 741
Carcinoma
bronchogenic, and extra-adrenal cortisol metabolism in, 192
oat cell, 17-hydroxycorticosteroid and 17-ketosteroid levels in, 192
of breast and widespread metastases causing death after mastectomy (CPC), 839
of lung, adrenocortical function in, 192
of parotid gland with metastasis to lung (CPC), 394
of upper respiratory and gastrointestinal tracts related to smoking, 88
Cardiac catheterization
see Catheterization, cardiac
Cardiovascular manifestations in ochronosis, 813
Carotid arteries, occlusive aortocranial disease of, difficulties in diagnosis and localization, 93
Carotid artery compression test in diagnosis of occlusive aortocranial disease, 93
Catalase activity in actalasia, 639
Catheterization, cardiac
hemodynamics of vasovagal reactions during, 42
in heart block, 325
in mitral stenosis, 308
in pericardial constriction, 142
in pulmonary artery-left atrium fistula, 721
Cell type of cancer, relation of steroid levels and survival time to, 192
Central nervous system
in acute tubulo-interstitial nephritis, 753
involvement in Torulopsis glabrata septicemia, 252
Cerebral blood flow in occlusive aortocranial disease, 93
Cerebral vascular insufficiency, aortocranial and intracerebral angiography in, 93
Chelating agents in Wilson's disease, 875
Children
adrenal medullary function in idiopathic hypoglycemia in, 168
cancer among, 168
Chromosomes, interaction in sex determination, 715
Cinefluoroscopy, vesicoureteral reflux, in children demonstrated by, 338
Circulation, bronchial, in congenital absence of pulmonary artery, 264
Circulatory function, importance of adrenergic nervous system in, 320
Cirrhosis
of liver and gynecomastia, 103
posthepatic, hypoparathyroidism and adrenocortical insufficiency, 856
Clinicopathologic Conferences
Cushing's syndrome associated with parotid gland tumor, 394
Jaundice, hepatomegaly and fever five years after a radical mastectomy, 839
Lymphosarcoma of stomach, poor response to radiation therapy and cardiac death, 242
Thoracic aneurysm, melena, hematemesis, hypercalcemia, skeletal and neurological lesions with sudden death, 113

# Subject Index


Clinicopathologic Conferences
Thoracotomy for right apical pulmonary lesion, 512
Coarctation of aorta and angina pectoris, 19
Combined Staff Clinic
Adenohypophysis, 365
Computer centers, regional (E), 295
Congenital absence of pulmonary artery, 264
Congenital communication between pulmonary artery and left atrium, 721
Consanguinity, genetic aspects of, 702
Copper balance study in Wilson's disease, 875
Coronary arteries, pathologic anatomy in angina pectoris, 19
Coronary artery disease, coronary angiograms and exercise electrocardiograms in study of, 19
Coronary insufficiency indicated by electrocardiographic proof of myocardial hypoxia, 19
Coronary vessels, fatal necrotizing polyarteritis of, induced by dexamethasone, 417
Corticosteroid therapy
associated with fatal necrotizing polyarteritis, 417
of anemia in macroglobulinemia, 213
Corticotropin-producing tumor with Cushing's syndrome, 726
Cortisol metabolism
disturbed in lung carcinoma, 192
in bronchogenic carcinoma, 177
Cryoglobulinemia, inherited molecular disease, 565
Cryoglobulins
amino acid composition of, 565
electrophoretic observations on, 565
Cushing's syndrome
associated with parotid gland tumor (CPC), 394
dexamethasone therapy in, 726
intense pigmentation in, 726
with malignant corticotropin-producing tumor, 726
Cutaneous manifestations of mycosis fungoides, 228
Cysts, renal, erythropoietin and polycythemia, 76
Cytoplasmic inclusion bodies in multiple myeloma with Fanconi syndrome, 125

Deoxyribonucleic acid (DNA)
carrier of genetic information, 609
structure, replication and organization of, 600
Dexamethasone
effects of therapy in multiple myeloma, 417
in Cushing's syndrome with malignant tumor, 726
unexpected response to therapy in multiple myeloma, 417
Diabetes mellitus
and arteriosclerosis, 177
and gynecomastia, 103
and surgery, study of 667 cases, 177
pharmacogenetic facets in, 639
relation to renal necrotizing papillitis, 82
Diabetic amyotrophy, 775
Dialysis in acute tubulo-interstitial nephritis, 753
Dietary supplementation in treatment of genetic disease, 594
Diethyldithiocarbamate therapy in hepatolenticular degeneration, 875
Diets, elimination, in treatment of genetic disease, 594
Dimercaptosuccinate (TWSb) therapy for Schistosomiasis mansoni, 477
Disease susceptibility, basis of inborn variations in, 628
DNA, mutagens and mutagenic effects on, 609
Drug action, variability of, genetic implications, 639
Drug avoidance in treatment of genetic disease, 594
Drugs, taste testing polymorphisms for, 639

Editorials
Characterization of renal tubular transport of sodium chloride and water as studied in single nephrons, 1
Foreword to Symposium on Genetics, 583
Penicillin allergy, 747
Polycythemia vera and arterial oxygen saturation, 435
Regional computer centers, 295
Ventricular end-diastolic pressure; appraisal of its value in recognition of ventricular failure in man, 147
Elastosis, description of, 7
Electrocardiogram, effect of treatment for Schistosomiasis mansoni on, 477
Electrocardiograms, exercise, in angina pectoris, 19
Electroencephalography in aortocranial disease, 93
Electromyography in idiopathic recurrent rhabdomyolysis, 426
Electron microscopy
in idiopathic recurrent rhabdomyolysis, 426
in multiple myeloma with Fanconi syndrome, 125
Electrophoresis
in cryoglobulinemia, 565
in thalassemia-hemoglobin E disease, 851
Emboli, occurrence after surgery for mitral stenosis, 308
Encephalopathy, portal-systemic, and portacaval anastomosis, 297
Endocarditis
fibroplastic parietal, with eosinophilia, 52
Hemophilus aphrophilus, 535
Löffler's, clinical, laboratory and anatomic features of, 52
subacute bacterial, caused by Hemophilus aphrophilus treated successfully, 535
Endocrine imbalance associated with gynecomastia, 103
Enteropathy, idiopathic protein-losing, in adult, with recovery, 572
Environment, role in genetics, 663
Enzyme activity
in hereditary fructose intolerance, 151
in rhabdomyolysis, 426
Eosinophilia
effect of treatment for schistosomiasis on, 477
in fibroplastic parietal endocarditis, 52
Epinephrine excretion test in idiopathic hypoglycemia, 168
Erythrocyte survival in macroglobulinemia, 213

# Subject Index


Erythrocytosis
  and uterine fibroids, surgical cure, 288
  cured by nephrectomy, 523
Erythrokinetics in macroglobulinemia, 213
Erythropoietin activity on renal cysts, 76
Estrogen, effect on luteinizing hormone secretion, 379
Ethnic groups, distribution of isoniazid inactivator phenotypes in, 639
Exercise electrocardiograms in angina pectoris, 19
Exercise test in cardiac evaluation, 452

Family counselling, role in genetics of disease, 585
Family history, taking, 585
Fanconi syndrome with multiple myeloma, 125
Fatty streaks, origin and meaning, 7
Favism
  and acute hemolytic anemia, 639
  and glucose-6-phosphate dehydrogenase deficiency, 639, 663
Fever
  jaundice and hepatomegaly after mastectomy (CPC), 839
  of obscure origin, diagnosis and treatment, 486
Fibroids in uterus associated with polycythemia, cured by surgery, 288
Fibroplastic parietal endocarditis with eosinophilia, 52
Fibrosis, radiation-induced cardiac, 71
Fistula, congenital, between pulmonary artery and left atrium, 721
Fitness, heterozygous superiority in, 702
Fructose and glucose metabolism, inter-relationships of, 151
Fructose intolerance, hereditary, inborn defect, 151

Gastrocnemius muscle, focal coagulation necrosis in idiopathic recurrent rhabdomyolysis, 426
Gastrointestinal tract
  carcinomas and smoking, 88
  function in hypoparathyroidism and adrenal insufficiency, 856
Gene action, nature of, 663
Gene mutations, structural and control in human genetics, 680
Genes, identification and classification, 628, 680
Genetic aspects of consanguinity, 702
Genetic basis of common disease, 627
Genetic disease, diagnosis, prognosis and treatment, 594
Genetic heterogeneity and glucose-6-phosphate dehydrogenase deficiency, 663
Genetic regulation in bacteria, 680
Genetic regulatory mechanisms, application to human genetics, 680
Genetic studies in thalassemia-hemoglobin E disease, 851
Genetic variations in man, 663
Genetics
  biochemical, at molecular level, 674
  human, associations and linkage in, 692
  human, ten leading discoveries in, 594
Genetics
  in medicine and medicine in genetics, 594
  of disease, family counselling in, 585
  of sex determinations in man, 715
  role in medicine, 594
  symposium on, 583–720
Genitourinary tract, complications in ochronosis, 813
Gigantism
  diminished production of hormones in, 407
  with hypopituitarism, 407
Glomerulonephritis, membranous, differential diagnosis, 867
Glucose levels
  in diabetic surgical patients, 177
  in idiopathic hypoglycemia, 168
Glucose-6-phosphate dehydrogenase deficiency
  and favism, 639, 663
  and genetic heterogeneity, 663
  and malaria, 639
  and neonatal jaundice, 639
  and primaquine sensitivity, 663
  genetic alteration responsible for, 680
  genetics and ecology of, 639
Glucose-6-phosphate dehydrogenase polymorphism, 680
Glomerular filtration rate, effect of radiation on, 329
Gonadotropin, diminished production in gigantism with hypopituitarism, 407
Graves' disease, adrenal steroid therapy of ophthalmopathy of, 786
Guanethidine, congestive failure aggravated by, 320
Gynecomastia, incidence, recognition and host characterization, 103

Haptoglobin
  and gene mutations, 680
  staining for identifying myoglobin in urine, 554
Heart
  see also Catheterization, cardiac
  block, atrial and ventricular pressures and atrial sounds in, 325
  damage in multiple myeloma, 417
  death, radiation therapy and lymphosarcoma (CPC), 242
  evaluation, exercise performance as part of, 452
  involvement with mycosis fungoides, 228
  failure
    adrenergic nervous system in, 320
    congestive, aggravated by guanethidine, 320
    occurrence after surgery for mitral stenosis, 308
  potassium changes in, during homeometric autoregulation and acetyl strophanthidin, 440
  radiation-induced fibrosis, 71
  role in development of vasovagal reactions, 42
  surgery, use of exercise test in selection of subjects for, 452
Heat and mutations, 609
Hemagglutination studies in penicillin allergy (E), 747
Hematemesis (CPC), 113

Hematologic data in thalassemia-hemoglobin E disease, 851
Hematologic features of mycosis fungoides, 228
Hematologic studies in hypoparathyroidism and adrenocortical insufficiency, 856
Heme compounds in urine in idiopathic recurrent rhabdomyolysis, 554
Hemodialysis
  in acute tubulo-interstitial nephritis, 753
  in uremia, 753
Hemodynamics
  during spontaneous vasovagal reactions, 42
  in congenital absence of pulmonary artery, 264
  of shock, 461
Hemoglobin
  abnormal, amino acid substitutions in, 674
  analysis in thalassemia-hemoglobin E disease, 851
  and gene mutations, 680
Hemoglobin E, origin in Turkish and Greek populations, 851
Hemoglobin H, 639
Hemoglobin Zürich, 639
Hemoglobinopathies and sulfonamides, 639
Hemolysis
  acute, and moth ball ingestion, 639
  and acute tubulo-interstitial nephritis, 753
Hemophilia, anticoagulant against antihemophilic globulin, 272
Hemophilus aphrophilus endocarditis, 535
Hemorrhage
  complication of acute tubulo-interstitial nephritis, 753
  variceal, portacaval anastomosis for prevention of recurrence, 297
Hepatic fructose-1-phosphate splitting aldolase, cause of hereditary fructose intolerance, 151
Hepatic function in hypoparathyroidism and adrenal insufficiency, 856
Hepatic involvement with mycosis fungoides, 228
Hepatitis
  adrenocortical insufficiency and hypoparathyroidism, possible sequel of, 856
  subacute, in Waldenström's macroglobulinemia, 256
Hepatolenticular degeneration
  metabolic balance studies in, 875
  treated with diethyldithiocarbamate, 875
Hepatomegaly, jaundice and fever after mastectomy (CPC), 839
Hereditary fructose intolerance, inborn defect of hepatic fructose-1-phosphate splitting aldolase, 151
Heredity and psychotherapeutic drugs, 639
Heterogeneity, 663
Heterozygous superiority in fitness, 702
Histamine inhalation, effects of postural changes during, 470
Homeometric autoregulation, potassium changes during, 440
Homogentisic acid oxidase deficiency in alcaptonuria, 813
Homozygosis, increase in, 702
Hormone secretion, hypophysial luteinizing, regulation of, 379
Hormones, tropic, regulatory mechanisms reviewed (CSC), 365
Human genetics
  application of genetic regulatory mechanisms to, 680
  associations and linkage in, 692
  ten leading discoveries in, 594
Hydrogen peroxide and actalasia, 639
Hydronephrosis and polycythemia, 523
17-Hydroxycorticosteroid levels in oat cell and undifferentiated carcinomas, 192
Hydroxylamine and mutations, 619
Hypercalcemia (CPC), 113
  of sarcoidosis, seasonal influence of sunlight on, 221
Hyperplasia
  adrenal, Cushing's syndrome due to mediastinal tumor and, 726
  adrenocortical
    and gynecomastia, 103
    produced by ACTH-secreting neoplasm (CPC), 394
  of pancreatic islets and ducts associated with gynecomastia, 103
Hypersensitivity responses elicitated by simple chemical determinant (E), 747
Hypersplenism
  response to decompression of portal circulation, 297
  thalassemia-hemoglobin E disease with, 851
Hypertension
  due to renal artery compression by pheochromocytoma, 735
  pulmonary, in congenital absence of pulmonary artery, 264
  renovascular, renogram as screening test for diagnosis of, 765
Hypoglycemia
  idiopathic
    adrenal medullary function in, 168
    blood sugar levels in, 168
  in hereditary fructose intolerance, 151
Hypoparathyroidism and adrenocortical insufficiency, possible sequel of hepatitis, 856
Hypophosphatemia in hereditary fructose intolerance, 151
Hypophysial luteinizing hormone secretion, regulation of, 379
Hypopituitarism with gigantism, 407
Hypoproteinemia, clinical remission of, 572
Hypotension, pathogenesis in scurvy, 350
Hypothalamus, role in luteinizing hormone secretion, 379
Hypoxia, myocardial, electrocardiographic proof indicative of coronary insufficiency, 19

$I^{131}$-hippuran renogram, alterations in, 765
Idiopathic hypoglycemia, adrenal medullary function in, 168

# Subject Index


Idiopathic recurrent rhabdomyolysis
clinical, chemical and morphologic study, 426
with myoglobinuria, 554
Inbreeding, consequences of, 702
Inclusion bodies, causal relation to renal abnormality in Fanconi syndrome, 125
Infants, adrenal medullary function in idiopathic hypoglycemia in, 168
Infarct, organizing, in upper lobe of lung (CPC), 512
Infection
complication of acute tubulo-interstitial nephritis, 753
due to nonpathogenic organisms of genus bacillus, 134
following surgery in diabetic patients, 177
hemodynamics in clinical shock associated with, 461
Inheritance patterns, 585
Insulin
antagonism, inherited mendelian dominant character, 639
dependent diabetic patients, management of, 177
tolerance in idiopathic hypoglycemia, 168
Intima, cellular thickening of, origin and description, 7
Iron deficiency in macroglobulinemia, 213
Isoniazid metabolism in man, genetic determination of, 639

Jaundice
hepatomegaly and fever after mastectomy (CPC), 839
neonatal
and glucose-6-phosphate dehydrogenase activity, 639
genetic factors in, 639
Joint involvement in ochronotic arthropathy, 813

17-Ketosteroid levels in oat cell and undifferentiated carcinomas, 192
Kidney
electron microscopy of, in multiple myeloma with Fanconi syndrome, 125
inclusion bodies in proximal tubles in multiple myeloma with Fanconi syndrome, 125
involvement with mycosis fungoides, 228
pathologic examination in unilateral renal ischemia, 735
polycythemia and hydronephrosis diminished after drainage of, 523
relation of inclusion bodies to abnormality in Fanconi syndrome, 125
Kidneys
fatal necrotizing polyarteritis of, induced by dexamethasone, 417
separate, variation between renograms of, 765

Lactation, effect on luteinizing hormone secretion, 379
Lactic acid dehydrogenase activity in pernicious anemia, 578
Leg pain, manifestation of leukemia, 281
Leukemia
acute monocytic, leukopenic infectious monocytosis simulating, 541
among adults, 796
among children in a suburban community, 796
spinal epidural, 281
Leukopenic infectious monocytosis simulating acute monocytic leukemia, 541
Lipid metabolism, abnormal, relation to pathogenesis of atherosclerosis, 741
Life span and cancer in smokers and nonsmokers, 88
Liver
cirrhosis of, and gynecomastia, 103
enzyme activities in hereditary fructose intolerance, 151
function, effect of treatment for Schistosomiasis mansoni on, 477
Löffler's endocarditis, clinical, laboratory and anatomic features of, 52
Lung
carcinoma of,
adrenocortical function in, 192
and smoking, 88
involvement with mycosis fungoides, 228
organizing infarct in upper lobe (CPC), 512
undifferentiated carcinoma of parotid gland with metastasis (CPC), 394
Luteinizing hormone secretion, regulation of, 379
Lymphadenopathy as manifestation of mycosis fungoides, 228
Lymphomas, malignant, natural history and relationship of mycosis fungoides to, 228
Lymphosarcoma, radiation therapy and cardiac death (CPC), 242

Macrocytic anemia, relation to intestinal malabsorption, 856
Macroglobulinemia
anemia in, 213
erythrokinetic and red cell survival studies in, 213
Waldenström's, subacute hepatitis in, 256
Malabsorption, intestinal, relation to macrocytic anemia, 856
Malaria and geographic distribution of glucose-6-phosphate dehydrogenase deficiency, 639
Malignancy related to smoking, 88
Marker genes, action and uses, 692
Marriages
consanguineous, and ochronosis, 813
genetic effect between first cousins, 702
Mastectomy, jaundice, hepatomegaly and fever after (CPC), 839
Mediastinum, malignant ACTH-secreting tumor of, causing Cushing's syndrome, 726
Medicine
in genetics and genetics in medicine, 594
role in advancement of genetics, 594
Megaloblastic anemia, pathogenesis in scurvy, 350
Melena (CPC), 113

Mendelian patterns of inheritance, 585
Mephentermine, effects on vasovagal reactions, 42
Metabolic balance studies in hepatolenticular degeneration, 875
Microperfusion studies of single nephrons in electrolyte transport (E), 1
Micropuncture studies in electrolyte transport by renal tubules (E), 1
Mitral regurgitation, postoperative problem, 308
Mitral valvotomy, clinical course and cause of death in, 308
Mönckeberg's medial calcification, description of, 7
Monocytosis, leukopenic infectious, simulating acute monocytic leukemia, 541
Mortality in acute anuric renal insufficiency, 753
Moth ball ingestion and acute hemolytic anemia, 639
Multiple myeloma (CPC), 113
  metabolic balance study of patient treated with dexamethasone, 417
  with Fanconi syndrome, 125
Muscle
  electron microscopic findings in idiopathic recurrent rhabdomyolysis, 426
  gastrocnemius, focal coagulation necrosis in idiopathic recurrent rhabdomyolysis, 426
  wasting, clinical feature of diabetic amyotrophy, 775
Mutagenic agents, 609
Mutagens and mutagenic effects on DNA, 609
Mutation
  and recombination, causes of heritable variation in man, 663
  balance between selection and, 702
  history and definition, 609
Mutations in control genes and structural genes, 680
Myalgia, clinical feature of diabetic amyotrophy, 775
Mycosis fungoides, natural history and relationship to other malignant lymphomas, 228
Myocardial hypoxia, electrocardiographic proof indicative of coronary insufficiency, 19
Myocardial infarction in one identical twin, 741
Myoglobinuria in idiopathic recurrent rhabdomyolysis, 554

Necrosis, focal coagulation, in gastrocnemius muscle in rhabdomyolysis, 426
Neoplasm, ACTH-secreting, producing adrenocortical hyperplasia (CPC), 394
Neoplasms, incidence in smokers, 88
Nephrectomy, erythrocytosis cured by, 523
Nephritis, acute tubulo-interstitial
  and acute anuric renal insufficiency, 753
  therapy for, 753
  underlying disease in, 753
Nephrons, single, renal tubular transport of electrolytes in (E), 1
Nephrotic syndrome and unilateral renal vein thrombosis, 867
Nervous system, adrenergic, importance in support of circulatory function in heart failure, 320
Neurologic complications in Behcet's disease, 544
Neurologic lesions (CPC), 113
Nickel balance study in Wilson's disease, 875
Nitrous acid and mutations, 609
Nodular arteriosclerosis, origin and meaning, 7
Nucleic acids and proteins, 600
Nurture-Nature issues, complexity of, 628

Oat cell carcinoma, 17-hydroxycorticosteroid and 17-ketosteroid levels in, 192
Obstetrical complications, acute anuric renal insufficiency resulting from, 753
Ochronosis
  and consanguineous marriages, 813
  clinical features and differential diagnosis, 813
Ochronotic arthropathy, clinical features, 813
Ochronotic spondylosis, signs and symptoms, 813
Ocular manifestations of ochronosis, 813
Ophthalmodynamometry in diagnosis of occlusive aortocranial disease, 93
Ophthalmopathy of Graves' disease treated with adrenal steroids, 786
Ovarian ascorbic acid depletion method, 379
Ovarian steroids, effect on luteinizing hormone secretion, 379
Overnutrition, habitual, abnormal metabolic state due to stress of, 741
Oxygen saturation, arterial, and polycythemia vera (E), 435

Pain, clinical feature of diabetic amyotrophy, 775
Pancreatic ducts and islets, hyperplasia of, associated with gynecomastia, 103
Paper electrophoresis in thalassemia-hemoglobin E disease, 851
Papillitis, renal necrotizing, relation to venous thrombosis and diabetes mellitus, 82
Para-amino hippuric acid, effect of loading on renogram, 765
Paraplegia secondary to epidural leukemia, 281
Parathyroid function in hypoparathyroidism and adrenal insufficiency, 856
Parotid gland carcinoma with metastasis to lung and Cushing's syndrome (CPC), 394
Penicillin allergy (E), 747
Penicilloyl-polylysine reactivity associated with penicillin allergy (E), 747
Perfusion-ventilation relationships in polycythemia vera (E), 435
Pericardium, constriction of, causing subvalvular pulmonary stenosis, 142
Peripheral blood, inclusion bodies in multiple myeloma with Fanconi syndrome, 125
Pernicious anemia, lactic acid dehydrogenase activity in, 578
Pharmacogenetics, 639
Phenothiazine, hereditary influence in responses to, 639
Phenylthiocarbamide, taste testing polymorphism for, 639

# Subject Index


Phenylthiocarbamide-tasting phenotype and thyroid disease, 639
Pheochromocytoma, unilateral renal ischemia due to renal artery compression by, 735
Pigmentation, intense, in Cushing's syndrome with malignant tumor, 726
Pituitary function
  in gigantism, 407
  in hypoparathyroidism and adrenal insufficiency, 856
Plasma pseudocholinesterases and suxamethonium, 639
Plasmapheresis in treatment of anemia in macroglobulinemia, 213
Poisoning, underlying disease in acute tubulo-interstitial nephritis, 753
Polyarteritis, fatal necrotizing, of coronary vessels and kidneys induced by dexamethasone, 417
Polycythemia
  and hydronephrosis, 523
  (erythrocytosis) associated with uterine fibroids cured by surgery, 288
  erythropoietin and renal cysts, 76
Polycythemia vera and arterial oxygen saturation (E), 435
Polymorphisms
  pharmacogenetic, 639
  taste testing, for drugs, 639
Polyneuritis and isoniazid metabolism, 639
Population fitness, comparison of, 702
Portacaval shunts, end-to-side, in management of ruptured varix, 297
Portal-systemic encephalopathy, undesirable side effect of portacaval anastomosis, 297
Position changes, effect on renogram, 765
Postcommissurotomy syndrome, occurrence after surgery for mitral stenosis, 308
Posture
  and experimental asthma, 470
  changes in, effect on renogram, 765
Potassium changes in heart during homeometric autoregulation and acetyl strophanthidin, 440
Prednisone therapy
  in fibroplastic parietal endocarditis, 52
  for Behcet's disease, 544
Primaquine sensitivity and glucose-6-phosphate dehydrogenase activity, 639, 663
Prostate abnormalities and gynecomastia, 103
Protein-losing enteropathy in adult with recovery, 572
Proteins and nucleic acids, 600
Pseudocholinesterases, plasma, and suxamethonium, 639
Psychotherapeutic drugs and heredity, 639
Pulmonary artery
  and left atrium, congenital communication between, 721
  congenital absence of, 264
Pulmonary hypertension in infants with congenital absence of pulmonary artery, 264
Pulmonary lesion, right apical, thoracotomy for (CPC), 512
Pulmonary stenosis, subvalvular, due to constriction of right ventricular outflow tract by pericardial band, 142
Pyelonephritis, role of vesicoureteral reflux in, 338

Quinine and taste testing polymorphisms, 639

Radiation
  and mutation, 609
  effects on renal function, 329
  induced cardiac fibrosis, 71
  therapy, lymphosarcoma and cardiac death (CPC), 242
  ultraviolet, influence on hypercalcemia of sarcoidosis, 221
Radioisotope renogram in normal subjects, 765
Radiomimetic agents and mutations, 609
Raynaud's disease, origin and description, 7
Recessive gene frequency, 702
Red cell synthesis in macroglobulinemia, 213
Reflux, vesicoureteral, role in pyelonephritis, 338
Regulatory mechanisms in gene mutations, 680
Regurgitation, mitral, postoperative problem, 308
Renal
  see also Kidney
  artery compression by pheochromocytoma, cause of unilateral renal ischemia, 735
  blood flow, effect of radiation on, 329
  cysts, erythropoietin activity in, 76
  function, effects of radiation on, 329
  insufficiency, acute anuric, causes, treatment, complications and mortality, 753
  ischemia, unilateral, due to renal artery compression by pheochromocytoma, 735
  necrotizing papillitis, relation to venous thrombosis and diabetes mellitus, 82
  tissue, microscopic examination in multiple myeloma with Fanconi syndrome, 125
  tubular transport of electrolytes in single nephrons (E), 1
  vein thrombosis and nephrotic syndrome, clinical features, 867
Renogram, radioisotope, in normal subjects, 765
Residual urine, respresentative of reflux rather than vesical neck obstruction, 338
Respiratory studies in patient with congenital absence of pulmonary artery, 264
Respiratory tract carcinomas and smoking, 88
Restenosis, problem following surgically modified mitral stenosis, 308
Rhabdomyolysis, idiopathic recurrent
  clinical, chemical and morphologic study of, 426
  with myoglobinuria, 554
Rheumatic-like illness among children, 796
Ribonucleic acid (RNA), structure and action, 600
Ribosomes, description and relation to DNA and RNA, 600

# Subject Index


Sarcoidosis, hypercalcemia of, seasonal influence of sunlight on, 221
Schistosomiasis mansoni treated with antimony dimercaptosuccinate (TWSb), 477
Screening procedures for penicillin allergy (E), 747
Screening test for diagnosis of renovascular hypertension, renogram as, 765
Scurvy, pathophysiology of, 350
Senile involution, description of, 7
Serum
  biochemical studies in Wilson's disease, 875
  calcium levels in sarcoidosis, 221
  enzyme activity in idiopathic recurrent rhabdomyolysis, 426
  glutamic oxalacetic transaminase, effect of treatment for Schistosomiasis mansoni on, 477
Sex determination in man, genetics of, 715
Shock
  clinical, associated with infection, 461
  hemodynamics of, 461
  in acute tubulo-interstitial nephritis, 753
Short-circuit current, measurement in tubular transport of electrolytes (E), 1
Shunts, end-to-side, for prevention of recurrent variceal hemorrhage, 297
Sickle cell anemia, punctate calcifications of spleen in, 483
Skeletal lesions (CPC), 113
Skin
  manifestations of ochronosis, 813
  pigmentation, intense, in Cushing's syndrome with malignant tumor, 726
Smokers, cancer and life span in, 88
Sodium chloride, renal tubular transport in single nephrons (E), 1
Somatotropin production in gigantism, 407
Sorbitol tolerance tests in hereditary fructose intolerance, 151
South Africa, fibroplastic parietal endocarditis in Cape Coloured from, 52
Spinal cord compression, initial manifestation of leukemia, 281
Spinal epidural leukemia, 281
Spinal involvement in ochronotic arthropathy, 813
Spleen, punctate calcifications in sickle cell anemia, 483
Staging problem in treatment evaluation, 359
Starch gel electropheresis in identifying myoglobin in urine, 554
Steatorrhea and hypoparathyroidism, relationship between, 856
Stenosis
  mitral, postoperative course of, 308
  subvalvular pulmonary, due to constriction of right ventricular outflow tract by pericardial band, 142
Steroid excretion
  in Cushing's syndrome with malignant tumor, 726
  in urine in gigantism, 407
Steroid levels, relation to survival time and cell type of cancer, 192
Steroid therapy
  for ophthalmopathy of Graves' disease, 786
  in Löffler's endocarditis, 52
Steroids, 17-ketogenic, in urine, 192
Stomach, lymphosarcoma of (CPC), 242
Stress of habitual overnutrition, abnormal metabolic state due to, 741
Succinic dehydrogenase in serum of patient with idiopathic recurrent rhabdomyolysis, 426
Sulfonamides and hemoglobinopathies, 639
Sunlight, seasonal influence on hypercalcemia of sarcoidosis, 221
Surgery and diabetes, study of 667 cases, 177
Surgical complications, acute anuric renal insufficiency resulting from, 753
Surgical correction of reflux, 338
Survival time, relation of steroid levels to, and cell type of cancer, 192
Suxamethonium and plasma pseudocholinesterases, 639
Sympathomimetic amines, effects on hemodynamics of vasovagal reactions, 42
Symposium on Genetics, 583–720
  Application of genetic regulatory mechanisms to human genetics, 680
  Associations and linkage in human genetics, 692
  Biochemical genetics at the molecular level, 674
  Foreword, 583
  Genetic aspects of consanguinity, 702
  Genetic basis of common disease, 627
  Genetic variations in man, 663
  Genetics in medicine and medicine in genetics, 594
  Genetics of sex determination in man, 715
  Mutations, 609
  Nucleic acids and proteins, 600
  Pharmacogenetics, 639
  Taking the family history, 585

Taste-testing polymorphisms for drugs, 639
Testes, relation between abnormalities and gynecomastia, 103
Thalassemia, control mechanisms in, 674
Thalassemia-hemoglobin E disease with hypersplenism, 851
Thiopentane, taste-testing polymorphism for, 639
Thiouracil, taste-testing polymorphism for, 639
Thoracic aneurysm (CPC), 113
Thoracotomy for right apical pulmonary lesion (CPC), 512
Thromboembolism in unilateral renal vein thrombosis, 867
Thrombosis, unilateral renal vein, and nephrotic syndrome, 867
Thyroid
  changes and gynecomastia, 103
  disease and phenylthiocarbamide-tasting phenotype, 639
  function in hypoparathyroidism and adrenal insufficiency, 856

Thyrotropin, diminished production in gigantism with hypopituitarism, 407
Tissue bleeding, pathogenesis in scurvy, 350
Torulopsis glabrata septicemia, 252
Treadmill test
in angina pectoris, 19
in evaluating disability in cardiac subjects, 452
Treatment evaluation, staging problem in, 359
Tropic hormones, regulatory mechanisms reviewed (CSC), 365
Tubular function, effects of radiation on, 329
Tubular transport and renogram contour, 765
Tubulo-interstitial nephritis and acute anuric renal insufficiency, 753
Tumor
malignant corticotropin-producing, with Cushing's syndrome, 726
of parotid gland associated with Cushing's syndrome (CPC), 394
pathologic examination in unilateral renal ischemia, 735
resection followed by remission and relapse, 726
Tumors of lung, adrenocortical function in patients with, 192
Tyrosine oxidation in alcaptonuria, 813

Ultracentrifugation of cryoglobulin, 565
Ultraviolet radiation by sunlight, influence on hypercalcemia in sarcoidosis, 221
Uremia, hemodialysis in, 753
Ureteral obstruction, effect on renogram, 765
Urinary excretion
of steroids
in Cushing's syndrome with malignant tumor, 726
in gigantism, 407
in unilateral renal ischemia, 735
Urinary tract infections, incidence of reflux in children with, 338
Urine
biochemical studies in Wilson's disease, 875
flow, effect of variations on normal renogram, 765
17-hydroxycorticosteroids in, 192
identification of myoglobin in, 554
Urine
17-ketogenic steroids in, 192
residual, representative of reflux rather than vesical neck obstruction, 338
unusual heme compounds in, in idiopathic recurrent rhabdomyolysis, 554
Uterus, fibroids in, associated with polycythemia, 288

Varix, ruptured, end-to-side portacaval shunt in management of, 297
Vasopressin, ovarian ascorbic acid depleted by, 379
Vasovagal reactions defined, 42
Veins, role in development of vasovagal reactions, 42
Venacavogram in diagnosis of unilateral renal vein thrombosis, 867
Venous thrombosis, relation to renal necrotizing papillitis, 82
Ventilation-perfusion relationships in polycythemia vera (E), 435
Ventricular end-diastolic pressure, value in recognition of ventricular failure (E), 147
Ventricular failure, ventricular end-diastolic pressure in appraisal of (E), 147
Ventricular pressure and atrial pressure in heart block, 325
Vesical neck obstruction, differentiation between reflux and, 338
Vesicoureteral reflux, role in pyelonephritis, 338
von Willebrand's disease, 236

Waldenström's macroglobulinemia, subacute hepatitis in, 256
Water, renal tubular transport in single nephrons (E), 1
Weight loss, clinical feature of diabetic amyotrophy, 775
Wilson's disease, dithiocarb treatment of, 875
Wyamine, effect on vasovagal reactions, 42

X chromosome in sex determination, 715
X-linked inheritance, 585

Y chromosome in sex determination, 715
Y-linked inheritance, 585

# The American Journal of Medicine

Editor: ALEXANDER B. GUTMAN, M.D.
*Professor of Medicine*
COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK
DIRECTOR, DEPARTMENT OF MEDICINE, THE MOUNT SINAI HOSPITAL, NEW YORK

Assistant Editors: MORTIMER E. BADER, M.D. and RICHARD A. BADER, M.D.
THE MOUNT SINAI HOSPITAL, NEW YORK

ADVISORY BOARD

A. MCGEHEE HARVEY, M.D., *Professor of Medicine*, Johns Hopkins University School of Medicine, *Baltimore;* CARL V. MOORE, M.D., *Professor of Medicine*, Washington University School of Medicine, *St. Louis;* DEWITT STETTEN, PH.D., M.D., Dean, Rutgers Medical School, *New Brunswick, N. J.*

ASSOCIATE EDITORS

GEORGE E. BURCH, M.D., *New Orleans;* CHARLES H. BURNETT, M.D., *Chapel Hill, N. C.;* CHARLES S. DAVIDSON, M.D., *Boston;* J. RUSSELL ELKINTON, M.D., *Philadelphia;* FRANK L. ENGEL, M.D., *Durham;* HALSTED R. HOLMAN, M.D., *Palo Alto;* ROBERT M. KARK, M.D., *Chicago;* HENRY G. KUNKEL, M.D., *New York;* ROBERT E. OLSON, M.D., *Pittsburgh;* GEORGE E. SCHREINER, M.D., *Washington, D. C.;* DONALD W. SELDIN, M.D., *Dallas;* GEORGE W. THORN, M.D., *Boston;* LAWRENCE E. YOUNG, M.D., *Rochester, N. Y.*

*Volume 34*
JANUARY TO JUNE
1963

*Published by*
THE REUBEN H. DONNELLEY CORPORATION
466 Lexington Avenue, New York 17, New York

COPYRIGHT, 1963
BY THE REUBEN H. DONNELLEY CORPORATION
*All Rights Reserved*

*Printed in the United States of America*

# CONTENTS OF VOLUME 34
## ORIGINAL ARTICLES

### *January*


| | | |
|---|---|---|
| Characterization of Renal Tubular Transport of Sodium Chloride and Water as Studied in Single Nephrons | *Gerhard Giebisch*<br>*Erich E. Windhager* | 1 |
| Arteriosclerosis and Atherosclerosis. The Need for Clear Thinking | *George Pickering* | 7 |
| Coronary Angiograms and the Exercise Electrocardiogram in the Study of Angina Pectoris | *Albert A. Kattus*<br>*Rex MacAlpin*<br>*William P. Longmire*<br>*Bernard J. O'Loughlin*<br>*Harry Bishop* | 19 |
| Hemodynamic Changes During Spontaneous Vasovagal Reactions | *Gerald Glick*<br>*Paul N. Yu* | 42 |
| Fibroplastic Parietal Endocarditis with Eosinophilia. Löffler's Endocarditis | *A. J. Brink*<br>*H. W. Weber* | 52 |
| Radiation-Induced Cardiac Fibrosis | *Emanuel Rubin*<br>*Jesus Camara*<br>*David M. Grayzel*<br>*Frederick G. Zak* | 71 |
| Renal Cysts, Erythropoietin and Polycythemia | *Wendell F. Rosse*<br>*Thomas A. Waldmann*<br>*Phin Cohen* | 76 |
| Renal Necrotizing Papillitis | *E. Edward Bittar*<br>*Lawrence Misanik* | 82 |
| Cancer and Life Span in Smokers and Non-Smokers | *Cassius M. Plair*<br>*Sigmund L. Wilens* | 88 |
| Diagnosis of Occlusive Aortocranial Disease | *Joseph F. Fazekas*<br>*Robert E. Paul, Jr.*<br>*Allen D. Callow*<br>*Ralph W. Alman* | 93 |
| Gynecomastia. Its Incidence, Recognition and Host Characterization in 447 Autopsy Cases | *Marjorie J. Williams* | 103 |
| Thoracic Aneurysm, Melena, Hematemesis, Hypercalcemia, Skeletal and Neurological Lesions with Sudden Death | | 113 |
| Multiple Myeloma with the Fanconi Syndrome. Study of a Case, with Electron Microscopy of the Kidney | *David J. Costanza*<br>*Marvin Smoller* | 125 |
| Serious Infections Due to "Non-Pathogenic" Organisms of the Genus Bacillus. Review of Their Status as Pathogens | *W. Edmund Farrar, Jr.* | 134 |
| Subvalvular Pulmonary Stenosis Due to Constriction of the Right Ventricular Outflow Tract by a Pericardial Band | *Charles J. McGaff*<br>*J. Alex Haller, Jr.*<br>*Leonard Leight*<br>*Beverly T. Towery* | 142 |


### *February*


| | | |
|---|---|---|
| The Ventricular End-Diastolic Pressure. Appraisal of Its Value in the Recognition of Ventricular Failure in Man | *Eugene Braunwald*<br>*John Ross, Jr.* | 147 |

Hereditary Fructose Intolerance. An Inborn Defect of Hepatic Fructose-1-Phosphate Splitting Aldolase . . . . . *E. R. Froesch, H. P. Wolf, H. Baitsch, A. Prader, A. Labhart* . . . . . 151

Adrenal Medullary Function in Idiopathic Spontaneous Hypoglycemia of Infancy and Childhood . . . . . *Shannon Brunjes, Joan Hodgman, Jacques Nowack, Varner J. Johns, Jr.* . . . . . 168

Diabetes and Surgery. A Study of 667 Cases . . . . . *John A. Galloway, Charles R. Shuman* . . . . . 177

Further Studies of Adrenocortical Function in Patients with Carcinoma of the Lung . . . . . *Emile E. Werk, Jr., Leon J. Sholiton, Richard T. Marnell* . . . . . 192

Anemia in Macroglobulinemia . . . . . *Martin J. Cline, Alan Solomon, Nathaniel I. Berlin, John L. Fahey* . . . . . 213

Seasonal Influence of Sunlight on the Hypercalcemia of Sarcoidosis . . . . . *Richard L. Taylor, Harold J. Lynch, Jr., W. Geoffrey Wysor, Jr.* . . . . . 221

Mycosis Fungoides. Natural History and Aspects of Its Relationship to Other Malignant Lymphomas . . . . . *Jerome B. Block, John Edgcomb, Arthur Eisen, Eugene J. Van Scott* . . . . . 228

von Willebrand's Disease . . . . . *Margareta Blombäck, J. Erik Jorpes, Inga Marie Nilsson* . . . . . 236

Lymphosarcoma of the Stomach, Poor Response to Radiation Therapy, and Cardiac Death . . . . . 242

Torulopsis Glabrata Septicemia . . . . . *Stanley Minkowitz, David Koffler, Frederick G. Zak* . . . . . 252

Subacute Hepatitis in Waldenström's Macroglobulinemia . . . . . *Seymour Cohen, Alan Solomon, Fiorenzo Paronetto, Hans Popper* . . . . . 256

Congenital Absence of a Pulmonary Artery. Report of a Case, with Special Reference to the Bronchial Circulation and Review of the Literature . . . . . *Celia Oakley, Gerald Glick, R. M. McCredie* . . . . . 264

Spontaneously Occurring Anticoagulant Against Antihemophilic Globulin in a Previously Normal Subject . . . . . *Lionel Ehrenworth* . . . . . 272

Spinal Epidural Leukemia . . . . . *David E. Wilhyde, John A. Jane, Sean Mullan* . . . . . 281

Polycythemia (Erythrocytosis) Associated with Uterine Fibroids and Apparent Surgical Cure . . . . . *Edward J. Hertko* . . . . . 288

### *March*


Regional Computer Centers . . . . . *Emil P. Taxay*. . . . . *Howard H. Aiken* . . . . 295

Experiences with Portacaval Anastomosis. Analysis of 104 Elective End-to-Side Shunts for the Prevention of Recurrent Hemorrhage from Esophagogastric Varices (1952 Through 1961) . . . . . *Louis M. Rousselot*. . . . *William F. Panke* . . . . *Rudolph F. Bono* . . . . *Augusto H. Moreno*. . . . 297

The Course of Surgically Modified Mitral Stenosis. Study of Ninety-Four Patients with Emphasis on the Problem of Restenosis. . . . . *Thomas A. Keith* . . . . *Noble O. Fowler* . . . . *James A. Helmsworth* . . . . *Harvey Gralnick* . . . . 308

Importance of the Adrenergic Nervous System in the Support of Circulatory Function in Patients with Congestive Heart Failure . . . . . *Thomas E. Gaffney*. . . . *Eugene Braunwald* . . . . 320

The Valve-Closing Function of the Right Atrium. A Study of Pressures and Atrial Sounds in Patients with Heart Block . *Colin Grant*. . . . . *David G. Greene* . . . . *Ivan L. Bunnell*. . . . . 325

Early Effects of Radiation on Renal Function in Man. . . *Louis V. Avioli*. . . . . *Michael Z. Lazor* . . . . *Ernest Cotlove* . . . . . *Kirkland C. Brace* . . . . *J. Robert Andrews* . . . . 329

Vesicoureteral Reflux. Role in Pyelonephritis . . . . . *John A. Hutch* . . . . *Earl R. Miller* . . . . *Frank Hinman, Jr.* . . . . 338

The Pathophysiology of Scurvy. A Report of Seven Cases. . *Joseph A. Chazan* . . . . *Steven Paul Mistilis* . . . . 350

A Note on the Staging Problem in Treatment Evaluation. . *D. Kodlin* . . . . . 359

The Adenohypophysis . . . . . 365

Recent Studies on the Regulation of Hypophysial Luteinizing Hormone Secretion . . . . . *S. M. McCann*. . . . . 379

Cushing's Syndrome Associated with a Parotid Gland Tumor. . . . . 394

Gigantism with Hypopituitarism . . . . . *Jack K. Goldman* . . . . *George F. Cahill, Jr.* . . . . *George W. Thorn* . . . . 407

Metabolic Balance Study of a Patient with Multiple Myeloma Treated with Dexamethasone. Dexamethasone-Induced Fatal Necrotizing Polyarteritis of Coronary Vessels and Kidneys . . . . . *William A. Skoog* . . . . *William S. Adams* . . . . 417

Idiopathic Recurrent Rhabdomyolysis. A Clinical, Chemical and Morphological Study . . . . . *Dante G. Scarpelli* . . . . *Marie H. Greider* . . . . *Walter J. Frajola* . . . . 426


### *April*


Polycythemia Vera and Arterial Oxygen Saturation . . . *Richard A. Bader* . . . . *Mortimer E. Bader*. . . . *Joel L. Duberstein* . . . . 435

| | | |
|---|---|---|
| Potassium Changes in the Heart During Homeometric Autoregulation and Acetyl Strophanthidin | *Stanley J. Sarnoff*<br>*Joseph P. Gilmore*<br>*Jere H. Mitchell*<br>*John P. Remensnyder* | 440 |
| Exercise Performance as Part of a Cardiac Evaluation | *Robert Gilbert*<br>*J. Howland Auchincloss, Jr.*<br>*Leonard Epifano* | 452 |
| Hemodynamic Studies on Clinical Shock Associated with Infection | *Vasant N. Udhoji*<br>*Max H. Weil*<br>*Mohinder P. Sambhi*<br>*Leonard Rosoff* | 461 |
| Effect of Posture in Experimental Asthma in Man | *Arend Bouhuys* | 470 |
| Observations on the Treatment of Schistosomiasis Mansoni with Antimony Dimercaptosuccinate (TWSb) | *Clifford L. Spingarn*<br>*Morton H. Edelman*<br>*Jerome D. Waye*<br>*Ephraim Donoso*<br>*Charles Gregory* | 477 |
| Punctate Calcifications of the Spleen in Sickle Cell Anemia | *Samuel D. Hemley*<br>*Harry Z. Mellins*<br>*Nathaniel Finby* | 483 |
| Fever of Obscure Origin. Diagnosis and Treatment Based on a Series of Sixty Cases | *Robert P. Sheon.*<br>*Ray A. Van Ommen* | 486 |
| Idiopathic True Bone Marrow Failure | *E. R. Movitt*<br>*J. F. Mangum.*<br>*W. R. Porter* | 500 |
| Thoracotomy for a Right Apical Pulmonary Lesion | | 512 |
| Hydronephrosis and Polycythemia. A Case of Erythrocytosis Relieved by Decompression of Unilateral Hydronephrosis and Cured by Nephrectomy | *Z. F. Jaworski.*<br>*C. T. Wolan* | 523 |
| Hemophilus Aphrophilus Endocarditis | *Thomas A. Keith, III*<br>*Samuel A. Lyon.* | 535 |
| Leukopenic Infectious Monocytosis. Report of a Case Closely Simulating Acute Monocytic Leukemia | *Gerald E. Stone.*<br>*Arthur J. Redmond.* | 541 |
| Neurologic Aspects of Behcet's Disease. Case Report and Review of the Literature | *Donald L. Schotland*<br>*Sheldon M. Wolf*<br>*Harry H. White*<br>*Howard V. Dubin* | 544 |
| Idiopathic Recurrent Rhabdomyolysis with Myoglobinuria. Case Report, with Diagnostic Recommendations and Demonstration of Unusual Heme Compounds in the Urine | *Richard J. Kossmann*<br>*Walter A. Camp*<br>*Ralph L. Engle, Jr.* | 554 |
| Cryoglobuinemia. An Inherited Molecular Disease? | *G. Sitomer*<br>*J. J. Blum.*<br>*R. E. Slavin* | 565 |
| Idiopathic Protein-Losing Enteropathy in an Adult, with Apparently Complete Recovery | *Robert M. Donaldson, Jr.*<br>*Peter R. Holt* | 572 |
| Excessively High Levels of Lactic Acid Dehydrogenase Activity in Pernicious Anemia | *Theodore G. Goldfarb*<br>*Béla J. Papp* | 578 |

### *May*


| | | |
|---|---|---|
| Foreword | *Alexander G. Bearn.* | 583 |
| Taking the Family History | *F. Clarke Fraser* | 585 |
| Genetics in Medicine and Medicine in Genetics | *Victor A. McKusick* | 594 |
| Nucleic Acids and Proteins | *C. I. Davern*<br>*J. Cairns* | 600 |
| Mutations | *Stephen Zamenhof* | 609 |
| The Genetic Basis of Common Disease | *J. H. Edwards.* | 627 |
| Pharmacogenetics | *David A. Price Evans* | 639 |
| Genetic Variations in Man | *Barton Childs*<br>*William J. Young* | 663 |
| Biochemical Genetics at the Molecular Level | *Vernon M. Ingram* | 674 |
| Application of Genetic Regulatory Mechanisms to Human Genetics | *W. Carey Parker*<br>*Alexander G. Bearn.* | 680 |
| Associations and Linkage in Human Genetics | *R. B. McConnell* | 692 |
| Genetic Aspects of Consanguinity | *C. C. Li* | 702 |
| The Genetics of Sex Determination in Man. | *Curt Stern* | 715 |
| Congenital Communication Between a Pulmonary Artery and the Left Atrium. Physiologic Observations and Review of the Literature. | *Edwin J. Kroeker*<br>*Herbert D. Adams*<br>*Arthur S. Leon*<br>*Jean M. Pouget* | 721 |
| Cushing's Syndrome with Malignant Corticotropin-Producing Tumor. Remission and Relapse Following Subtotal Adrenalectomy and Tumor Resection | *Frank L. Engel.*<br>*Lawrence Kahana* | 726 |
| Unilateral Renal Ischaemia Due to Compression of a Renal Artery by a Phaeochromocytoma | *M. L. Rosenheim*<br>*E. J. Ross*<br>*O. M. Wrong*<br>*C. J. Hodson*<br>*D. R. Davies*<br>*J. F. Smith* | 735 |
| Myocardial Infarction in One of a Pair of Twenty-Seven Year Old Identical Male Twins | *Robert S. Lees*<br>*George P. Canellos*<br>*Irwin H. Rosenberg.*<br>*Frederick T. Hatch.* | 741 |


### *June*


| | | |
|---|---|---|
| Penicillin Allergy | *Charles W. Parker* | 747 |
| A Survey of 499 Patients with Acute Anuric Renal Insufficiency. Causes, Treatment, Complications and Mortality | *Jørgen T. Balsløv*<br>*Hans E. Jørgensen* | 753 |
| The Radioisotope Renogram in Normal Subjects | *Richard P. Wedeen.*<br>*Marvin H. Goldstein*<br>*Marvin F. Levitt* | 765 |
| Diabetic Amyotrophy | *Simeon Locke*<br>*Donald G. Lawrence*<br>*Merle A. Legg* | 775 |

Adrenal Steroid Therapy of Severe Infiltrative Ophthalmopathy of Graves' Disease . . . . . *Josiah Brown, Jack W. Coburn, Richard A. Wigod, John M. Hiss, Jr., J. Thomas Dowling* 786

Leukemia Among Children in a Suburban Community . . . *Clark W. Heath, Jr., Robert J. Hasterlik* 796

Biochemical, Pathologic and Clinical Aspects of Alcaptonuria, Ochronosis and Ochronotic Arthropathy. Review of World Literature (1584–1962) . . . . . *William M.O'Brien, Bert N. La Du, Joseph J. Bunim* 813

Jaundice, Hepatomegaly and Fever Five Years After a Radical Mastectomy . . . . . 839

Thalassemia-Hemoglobin E Disease in Turkey, with Hypersplenism in One Case . . . . . *Muzaffer Aksoy, Arif Ismet Çetingil, Necati Kocabalkan, Dimitri Şestakof, Turgut Aladağ, Fuzuli Seçer, Nihat Bostanci* 851

The Syndrome of Hypoparathyroidism and Adrenocortical Insufficiency, a Possible Sequel of Hepatitis. Case Report and Review of the Literature . . . . . *Arthur S. Kunin, Bruce R. MacKay, Stanley L. Burns, Michael J. Halberstam* 856

Unilateral Renal Vein Thrombosis Associated with the Nephrotic Syndrome . . . . . *John F. Morris, H. Earl Ginn, David D. Thompson* 867

Metabolic Balance Studies in Hepatolenticular Degeneration Treated with Diethyldithiocarbamate . . . . . *F. William Sunderman, Jr., Joseph C. White, F. William Sunderman, with the technical assistance of George W. Lucyszyn* 875

Author Index . . . . . 889

Subject Index . . . . . 891